

**United States Environmental Protection Agency  
Region 7  
300 Minnesota Avenue  
Kansas City, KS 66101**

**Date:** JUN 28 2016

**Subject:** Transmittal of Sample Analysis Results for ASR #: 7131

Project ID: EH07RZG

Project Description: Newton County Mine Tailings - Granby subdistrict

**From:** Margaret E.W. St. Germain, Chief *M St Germain*  
Laboratory Technology & Analysis Branch, Environmental Sciences & Technology Division

**To:** Elizabeth Hagenmaier  
SUPR/SPEB

Enclosed are the analytical data for the above-referenced Analytical Services Request (ASR) and Project. The Regional Laboratory has reviewed and verified the results in accordance with procedures described in our Quality Manual (QM). In addition to all of the analytical results, this transmittal contains pertinent information that may have influenced the reported results and documents any deviations from the established requirements of the QM.

Please contact us within 14 days of receipt of this package if you determine there is a need for any changes. Please complete the enclosed Customer Satisfaction Survey and Data Disposition/Sample Release memo for this ASR as soon as possible. The process of disposing of the samples for this ASR will be initiated 30 days from the date of this transmittal unless an alternate release date is specified on the Data Disposition/Sample Release memo.

If you have any questions or concerns relating to this data package, contact our customer service line at 913-551-5295.

Enclosures

cc: Analytical Data File.

07RZ

40514432

53



Superfund

6/28/14

0402

**Project Manager:** Elizabeth Hagenmaier**Org:** SUPR/SPEB**Phone:** 913-551-7939**Project ID:** EH07RZG**QAPP Number:** 2007197**Project Desc:** Newton County Mine Tailings - Granby subdistrict**Location:** Granby**State:** Missouri**Program:** Superfund**Site Name:** NEWTON COUNTY MINE TAILINGS - REMAINDER OF  
NEWTON COUNTY**Site ID:** 07RZ **Site OU:** 02**GPRA PRC:** 303DD2**Purpose:** Site Characterization

Subdistrict supplemental sampling.

**Explanation of Codes, Units and Qualifiers used on this report****Sample QC Codes:** QC Codes identify the type of sample for quality control purpose.**Units:** Specific units in which results are reported.\_\_\_ = Field Sample  
FD = Field Duplicatemg/kg = Milligrams per Kilogram  
% = Percent**Data Qualifiers:** Specific codes used in conjunction with data values to provide additional information on the quality of reported results, or used to explain the absence of a specific value.

(Blank)= Values have been reviewed and found acceptable for use.

J = The identification of the analyte is acceptable; the reported value is an estimate.

**ASR Number: 7131****Sample Information Summary****06/28/2016****Project ID: EH07RZG****Project Desc: Newton County Mine Tailings - Granby subdistrict**

| Sample No | QC Code | Matrix | Location Description | External Sample No | Start Date | Start Time | End Date   | End Time | Receipt Date |
|-----------|---------|--------|----------------------|--------------------|------------|------------|------------|----------|--------------|
| 1 - ___   |         | Solid  | G3, Stream #3        |                    | 05/25/2016 | 14:30      | 05/25/2016 | 14:30    | 06/01/2016   |
| 2 - ___   |         | Solid  | Behind AS 1 #2       |                    | 05/25/2016 | 11:25      | 05/25/2016 | 11:25    | 06/01/2016   |
| 3 - ___   |         | Solid  | City Park #3         |                    | 05/24/2016 | 15:00      | 05/24/2016 | 15:00    | 06/01/2016   |
| 3 - FD    |         | Solid  | City Park #3         |                    | 05/24/2016 | 15:00      | 05/24/2016 | 15:00    | 06/01/2016   |

**ASR Number:** 7131

**RLAB Approved Analysis Comments**

**06/28/2016**

**Project ID:** EH07RZG

**Project Desc** Newton County Mine Tailings - Granby subdistrict

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| Analysis | Comments About Results For This Analysis |
|----------|--|
|----------|--|

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1 Metals in Solids by ICP-AES

**Lab:** Region 7 ESAT Contract Lab (In-House)

**Method:** EPA Region 7 RLAB Method 3122.3F

**Basis:** Dry

**Samples:** 1-\_\_ 2-\_\_ 3-\_\_ 3-FD

**Comments:**

Cadmium (68,63,75-105) was J-coded in sample 1 . Although the analyte in question has been positively identified in the sample, the quantitation is an estimate (J-coded) due to low recovery of this analyte in the laboratory matrix spike. The actual concentration for this analyte may be higher than the reported value.

1 Percent Solid

**Lab:** Region 7 ESAT Contract Lab (In-House)

**Method:** EPA Region 7 RLAB Method 3142.9H

**Basis:** N/A

**Samples:** 1-\_\_ 2-\_\_ 3-\_\_ 3-FD

**Comments:**

(N/A)

**ASR Number:** 7131

**RLAB Approved Sample Analysis Results**

**06/28/2016**

**Project ID:** EH07RZG

**Project Desc:** Newton County Mine Tailings - Granby subdistrict

| <b>Analysis/ Analyte</b>      | <b>Units</b> | <b>1-__</b> | <b>2-__</b> | <b>3-__</b> | <b>3-FD</b> |
|-------------------------------|--------------|-------------|-------------|-------------|-------------|
| 1 Metals in Solids by ICP-AES |              |             |             |             |             |
| Cadmium                       | mg/kg        | 33.3 J      | 5.7         | 15.1        | 14.8        |
| Lead                          | mg/kg        | 345         | 718         | 479         | 515         |
| Zinc                          | mg/kg        | 5340        | 7590        | 3210        | 3440        |
| 1 Percent Solid               |              |             |             |             |             |
| Solids, percent               | %            | 87.9        | 59.6        | 85.6        | 78.2        |

|  |                    |  |             |  |   |                               |          |          |   |      |
|--|--------------------|--|-------------|--|---|-------------------------------|----------|----------|---|------|
| ACTIVITY LEADER(Print)<br><i>Elizabeth Hagenmaier</i>                        |                    | NAME OF SURVEY OR ACTIVITY<br><i>NCMT Supp. Sampling</i> |             | DATE OF COLLECTION<br><i>15</i> <i>6</i> <i>2016</i>                         |   | SHEET<br><i>1</i> of <i>1</i> |          |          |   |      |
| CONTENTS OF SHIPMENT   |                    |  |             |  |   |                               |          |          |   |      |
| SAMPLE<br>NUMBER   | TYPE OF CONTAINERS |  |             |  | SAMPLED MEDIA   |                               |          |          | RECEIVING LABORATORY<br>REMARKS-OTHER INFORMATION<br>(condition of samples upon receipt,<br>other sample numbers, etc.) |      |
|  | CUBITAINER         | <i>802</i><br>BOTTLE                                     | BOTTLE      | BOTTLE   | VOA SET<br>(2 VIALS EA)   | water                         | soil     | sediment |   | dust |
| NUMBERS OF CONTAINERS PER SAMPLE NUMBER                                      |                    |  |             |  |   |                               |          |          |   |      |
| <i>7131-1</i>  |                    | <i>1</i>   |             |  |   |                               | <i>X</i> |          |   |      |
| <i>7131-2</i>  |                    | <i>1</i>   |             |  |   |                               | <i>X</i> |          |   |      |
| <i>7131-3</i>  |                    | <i>1</i>   |             |  |   |                               | <i>X</i> |          |   |      |
| <i>7131-3 FD</i>   |                    | <i>1</i>   |             |  |   |                               | <i>X</i> |          |   |      |
| <i>Complete</i>  |                    |  |             |  |   |                               |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <i>NO ice</i>  |                    |  |             |  | <i>PM, 6/1/16</i>   |                               |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| DESCRIPTION OF SHIPMENT  |                    |  |             |  | MODE OF SHIPMENT  |                               |          |          |   |      |
| <i>4</i> PIECE(S) CONSISTING OF _____ BOX(ES)                                |                    |  |             |  | ____ COMMERCIAL CARRIER _____   |                               |          |          |   |      |
| <i>1</i> ICE CHEST(S); OTHER _____   |                    |  |             |  | ____ COURIER _____  |                               |          |          |   |      |
|  |                    |  |             |  | <input checked="" type="checkbox"/> SAMPLER CONVEYED (SHIPPING DOCUMENT NUMBER) _____ |                               |          |          |   |      |
| PERSONNEL CUSTODY RECORD   |                    |  |             |  |   |                               |          |          |   |      |
| RELINQUISHED BY (SAMPLER)  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
| <i>Serena S. Ford</i>  |                    | <i>20/6/2016</i>   | <i>1500</i> | <i>Nicole Roulx</i>  |   | <i>Analysis</i>               |          |          |   |      |
| <input type="checkbox"/> SEALED <input checked="" type="checkbox"/> UNSEALED |                    |  |             | <input type="checkbox"/> SEALED <input checked="" type="checkbox"/> UNSEALED |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
| RELINQUISHED BY  |                    | DATE   | TIME        | RECEIVED BY  |   | REASON FOR CHANGE OF CUSTODY  |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                    |  |             | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |   |                               |          |          |   |      |
|  |                    |  |             |  |   |                               |          |          |   |      |

**Sample Collection Field Sheet**  
**US EPA Region 7**  
**Kansas City, KS**

**ASR Number:** 7131    **Sample Number:** 1    **QC Code:** \_\_\_\_    **Matrix:** Solid    **Tag ID:** 7131-1-\_\_\_\_

**Project ID:** EH07RZG    **Project Manager:** Elizabeth Hagenmaier  
**Project Desc:** Newton County Mine Tailings - Granby subdistrict  
**City:** Granby    **State:** Missouri  
**Program:** Superfund  
**Site Name:** NEWTON COUNTY MINE TAILINGS - REMAINDER OF    **Site ID:** 07RZ    **Site OU:** 02  
NEWTON COUNTY

**Location Desc:** G3 Stream #3

**External Sample Number:** G3 Stream #3

**Expected Conc:** 800-1200 ppm (or Circle One: Low Medium High)    **Date**    **Time(24 hr)**

**Latitude:** 36° 55' 45.80

**Sample Collection: Start:** 5/25/16    14:30

**Longitude:** 94° 15' 36.28

**End:** 5/25/16    14:30

**Laboratory Analyses:**

| Container      | Preservative | Holding Time | Analysis                      |
|----------------|--------------|--------------|-------------------------------|
| 1 - 8 oz glass | 4 Deg C      | 180 Days     | 1 Metals in Solids by ICP-AES |
| 0 -            | 4 Deg C      | Days         | 1 Percent Solid               |

**Sample Comments:**

(N/A)

**Sample Collected By:** EPA

**Sample Collection Field Sheet**  
**US EPA Region 7**  
**Kansas City, KS**

**ASR Number:** 7131    **Sample Number:** 2    **QC Code:** \_\_\_\_    **Matrix:** Solid    **Tag ID:** 7131-2-\_\_

**Project ID:** EH07RZG    **Project Manager:** Elizabeth Hagenmaier  
**Project Desc:** Newton County Mine Tailings - Granby subdistrict  
**City:** Granby    **State:** Missouri  
**Program:** Superfund  
**Site Name:** NEWTON COUNTY MINE TAILINGS - REMAINDER OF    **Site ID:** 07RZ    **Site OU:** 02  
NEWTON COUNTY

**Location Desc:** Behind AS1 #2

**External Sample Number:** Behind AS1 #2

**Expected Conc:** 400-800 ppm (or Circle One: Low Medium High)    **Date**    **Time(24 hr)**  
**Latitude:** 36° 54' 36.27    **Sample Collection: Start:** 5/25/16    11:25  
**Longitude:** 94° 15' 4.89    **End:** 5/25/16    11:25

**Laboratory Analyses:**

| Container      | Preservative | Holding Time | Analysis                      |
|----------------|--------------|--------------|-------------------------------|
| 1 - 8 oz glass | 4 Deg C      | 180 Days     | 1 Metals in Solids by ICP-AES |
| 0 -            | 4 Deg C      | Days         | 1 Percent Solid               |

**Sample Comments:**

(N/A)

**Sample Collected By:** EPA



# Sample Collection Field Sheet

US EPA Region 7

Kansas City, KS

ASR Number: 7131 Sample Number: 3 QC Code: \_\_\_ Matrix: Solid Tag ID: 7131-3-\_\_\_

Project ID: EH07RZG

Project Manager: Elizabeth Hagenmaier

Project Desc: Newton County Mine Tailings - Granby subdistrict

City: Granby

State: Missouri

Program: Superfund

Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF  
NEWTON COUNTY

Site ID: 07RZ Site OU: 02

Location Desc: City Park #3

External Sample Number: CP #3

Expected Conc: 20-600ppm (or Circle One: Low Medium High) Date Time(24 hr)

Latitude: 36° 54' 59.25

Sample Collection: Start: 5/24/16

15:00

Longitude: 94° 15' 25.04

End: 5/24/16

15:00

## Laboratory Analyses:

| Container      | Preservative | Holding Time | Analysis                      |
|----------------|--------------|--------------|-------------------------------|
| 1 - 8 oz glass | 4 Deg C      | 180 Days     | 1 Metals in Solids by ICP-AES |
| 0 -            | 4 Deg C      | Days         | 1 Percent Solid               |

## Sample Comments:

(N/A)

Sample Collected By: EPA

# Sample Collection Field Sheet

US EPA Region 7

Kansas City, KS

ASR Number: 7131 Sample Number: 43 QC Code: FD Matrix: Solid Tag ID: 7131-4-\_\_

Project ID: EH07RZG

Project Manager: Elizabeth Hagenmaier

Project Desc: Newton County Mine Tailings - Granby subdistrict

City: Granby

State: Missouri

Program: Superfund

Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF  
NEWTON COUNTY

Site ID: 07RZ Site OU: 02

Location Desc: CP City Park #3

External Sample Number: CP #3 FD

Expected Conc: 200-400 (or Circle One: Low Medium High) Date Time(24 hr)

Latitude: 36° 54' 59.25"

Sample Collection: Start: 5/24/16 15:00

Longitude: 94° 15' 25.04"

End: 5/24/16 15:00

## Laboratory Analyses:

| Container      | Preservative | Holding Time | Analysis                      |
|----------------|--------------|--------------|-------------------------------|
| 1 - 8 oz glass | 4 Deg C      | 180 Days     | 1 Metals in Solids by ICP-AES |
| 0 -            | 4 Deg C      | Days         | 1 Percent Solid               |

## Sample Comments:

(N/A)

Sample Collected By: EPA